point allocations and point-to-multipoint allocations.[31/] The sharing of 17.7-19.7 GHz between microwave and satellite users was raised when the channel plan was adopted, and was disposed of without providing any special consideration for satellite operations.[32/] As a result, it is virtually impossible to locate Ka-band satellite earth stations in urban areas.

26. Consequently, implementation of LMDS in urban areas is not likely to make it any more difficult to site Ka-band earth stations than is already the case.

27. It should be noted that frequency coordination will not be needed by Ka-band satellite earth stations in the upper 500 MHz of the Ka-band uplink and downlink frequencies. There is no terrestrial microwave permitted in these bands. The only Ka-band satellite applicant, Norris Satellite Communications, Inc., has chosen this microwave-free allocation for its system.[33/]

VI. THE MOTOROLA IRIDIUM LEOS SYSTEM

28. Motorola has sought 100 MHz of spectrum in the 27.5-30.0 GHz band for uplink control channels for its Iridium LEOS system. Motorola can site its uplink stations in sparsely populated rural

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[31/] 18142-18580 MHz, 18120-18920 MHz and 19160-19260 MHz are allocated for point-to-multipoint use.

[32/] Id. at ¶¶ 37-41.

[33/] File Nos. 54 and 55-DSS-P-90.

areas so as to avoid any major LMDS interference problems.[34/] As a practical matter, it is unlikely that a new antenna farm, consisting of several earth stations constantly in motion to track the orbiting satellites, can achieve local zoning and environmental approvals in most urban areas. As an alternative, Motorola can choose frequencies in the 29.5-30.0 GHz range to avoid interference problems which may occur at the Iridium LEOS site.

VII. THE NASA ACTS SATELLITE SYSTEM

29. The NASA Advanced Communications Technology Satellite ("ACTS"), was described in a Certification of Spectrum Support, dated February 4, 1993 (the "Certification"), entered into the record of this proceeding. The ACTS satellite is an experimental research program intended to develop and test high-risk technologies. The planned launch date is June 30, 1993. The ACTS satellite has a design life of four years.

30. According to the Certification, the ACTS system plans to use 18.8-20.2 GHz for downlinks and 27.5-30.0 GHz for uplinks. Within the 18.8-20.2 GHz band, five specific channels will be used (19.467, 19.91, 19.914, 20.185 and 20.195 GHz). Within the 27.5-30.0 GHz band, six specific channels will be used (29.242, 29.263, 29.298, 29.450, 29.634 and 29.975 GHz). There is no identification of uplink/downlink channel pairing. Uplink bandwidths are 41 MHz and 165 MHz. Downlink bandwidths are 165 MHz and 331 MHz.

[34/] It is obvious that horizon-to-horizon satellite uplinks operating at the same frequency as LMDS will cause interference to LMDS.

A. The Acts Earth Stations Should Be Licensed As Experimental Earth Stations

31. Because the ACTS satellite has been licensed as an experimental research program,[35/] any associated earth stations should be licensed in the same manner. As such, they would be secondary to LMDS licensed operations.

32. An experimental radio license grants the licensee the right to use the radio spectrum so long as its station causes no interference to regularly-licensed services, and so long as the experimental station is willing to accept interference from regularly-licensed services. An experimental station is not entitled to protection against interference. Instead, licensees of experimental stations must design their systems and choose frequencies that are not at risk from interference.

33. NASA has identified about eighteen locations in or near major cities where ACTS earth stations will be located. These locations are where terrestrial microwave systems are likely to be in use on the downlink frequencies around 19.4 GHz. Furthermore, a review of recent FCC Public Notices for common carrier and private terrestrial microwave applications indicates that frequencies around 19.4 GHz are already widely used by terrestrial microwave licensees[36/] such as cellular operators, local bypass

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[35/] According to NTIA memorandum from Gordon A. Crandall to Eugene Chang (January 13, 1993), "NASA has obtained experimental frequency assignments for ACTS program" with station class XR (experimental-research).

[36/] For example, licensees operating on these frequencies include the County of San Bernardino, Dallas SMSA Limited

(continued...)

carriers and local governments. However, it does not appear that NASA has undertaken any frequency coordination with microwave licensees.

34. The Certification claims that NASA's system design and [redacted]

horizon direction is an appropriate means for the experimental earth station licensees to protect LMDS stations from interference. In light of the four-year design life of the satellite, it may well be that these earth stations will be off the air before any LMDS stations are deployed. But, if LMDS sites are deployed during this period, the earth stations, as experimental licensees, should be obligated to eliminate any interference they cause. Suite 12 recommends that the NASA uplink be located in sparsely populated rural areas.

37. Granting a special interference protection status to earth stations used in an experimental program would be

39. The ACTS system will not meet user needs for VSAT networks because the Commission will not be able to employ blanket licensing for Ka-band VSATs in the 27.5-29.5 and 17.7-19.7 GHz portion of the Ka-band. These frequencies will always need individual frequency coordination and licensing, rather than blanket licensing.[37/] The FCC's policy of Ku-band VSAT blanket licensing and elimination of frequency coordination has been the essential regulatory element that has met marketplace needs and provided users with important benefits. This Ku-band policy has eliminated both the time delays and administrative burdens that apply to C-band earth stations. But, as NASA will learn, these delays and burdens will make impractical the use of the shared portion of the Ka-band satellite allocation for VSATs.

VIII. TECHNICAL FLEXIBILITY

40. At Paragraph 23 of the Notice, the Commission states that it does not want to adopt restrictive technical standards for LMDS. Suite 12 supports this view. Undue restrictive technical rules would destroy many of the benefits that this technology might otherwise bring to the public. Consumer needs can best be met by permitting LMDS operators flexibility to meet those needs. However, in order to assure spectral efficiency and maximum system

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[37/] As discussed previously, the Ka-band satellite allocation consists of a part of 2500 MHz bands, one at 27.5-30.0 GHz for uplinks and one at 17.7-20.2 GHz for downlinks. The satellite allocation is shared with terrestrial microwave users in the 27.5-29.5 and 17.7-19.7 GHz portion, but is not shared in the 29.5-30.0 and 19.7-20.2 GHz portion.

capacity, while at the same time minimizing interference, the Commission should require LMDS systems to use narrow beam receiver antennas and orthogonal adjacent cell polarization. This technical flexibility is necessary because LMDS is a multifunction transport system technology (not a video, voice or data system) similar to a fiber optic cable, capable of providing two-way video, voice and data services with various modulation techniques.[38/] Technical flexibility will promote timely and well-focused marketplace responses by LMDS licensees to consumer needs.

41. Suite 12 also agrees with the Commission's assessment at paragraph 24 of the Notice that technical regulations are required to insure adequate interference control and coordination of services among and between the licensees at 28 GHz. A framework for coordinating proposed frequency usage with existing LMDS licensees as proposed in Section 21.1002 (b) is required. However, the Commission failed to recognize that there may be a risk of Band B transmitters causing interference to some Band A receivers, if Band A receivers are much closer to the unwanted Band B transmitters than they are to the wanted Band A transmitters. This is the traditional "near-far" problem. Frequency coordination cannot deal with this problem if the Band A receiver locations are not known to the Band B licensee. One solution may be to collocate Band A and Band B transmitter sites, as well as employ antenna

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[38/] These modulation techniques include FM, QAM, QPSK, digital, MSK, GMSK, spread spectrum, frequency hop or various ISDN modulations. See generally Sarnoff Report.

directivity or other interference mitigation techniques at "problem" locations.

IX. COMMON vs. NON-COMMON CARRIER REGULATORY ISSUES

42. Paragraph 26 of the Notice raises several questions with regard to whether licensees may elect to be regulated as common carriers or non-common carriers. The Commission proposes that LMDS licensees choose whether they will operate as a common or non-common carrier on a channel-by-channel and/or cell-by-cell basis. Suite 12 supports this proposal. By permitting LMDS licensees the maximum amount of flexibility to serve consumers based on the dictates of the marketplace, Suite 12 believes that the agency's proposal will benefit consumers. However, Suite 12 suggests that the second sentence of proposed rule 21.1003 (b) be revised to read as follows:

> Areas and channels not on record as being in a common carrier status will be presumed to be in non-common carrier status.

The rule as proposed presumes common carrier status. Due to the

Commission enacts the proposed rule without Suite 12's suggested change and if the Commission permits an easy channel-by-channel and cell-by-cell election, as proposed, an inadvertent omission to notify the Commission about one channel or cell is highly likely. Therefore, Suite 12 respectfully requests the Commission revisit this issue and favor a presumption of non-common carrier status.

43. Footnote 8 of the Notice asks for comment on the notification of status election, calling particular attention to the election process currently specified in Section 21.900 of the Rules for use by MMDS licensees. While Suite 12 believes that the process specified in Section 21.900 is an appropriate model for LMDS licensees, the rule should be modified for LMDS in order to provide that a licensee must notify the Commission of its election on a channel-by-channel and cell-by-cell basis at the same time it is ready to begin commercial operation. The rule also should provide that the licensee can change the status of any channel or cell by giving the Commission notice thereof.[40/] Suite 12 recommends these changes in Section 21.900 because Section 21.900 was written for a service which is not a transport service capable of many different types of services on a channel-by-channel or cell-by-cell basis. The modifications Suite 12 proposes takes this

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[39/](...continued)
Section 21.910. This seems inordinately burdensome, particularly considering the fact that, solely because of the presumption of common carrier status, an LMDS licensee may find himself in this situation unintentionally.

[40/]Common carriers electing out of common carrier status would have to comply with 47 C.F.R. Section 21.910.

difference into account. Furthermore, the suggested modifications will also provide LMDS licensees with the maximum flexibility possible in order that they might better respond to consumer demand and the dictates of the marketplace, similar to the use of satellite transponders.

44. Paragraph 26 of the Notice seeks comments on the basis on which the "notification of status" election should be made by a LMDS licensee. Suite 12 believes that, except to the extent that

the existing video dialtone policies preclude local exchange common carriers from having any form of involvement with the content of the programming carried by their facilities, except as specifically provided for in the video dialtone policy, there should be no such limitation on a LMDS operator because LMDS is a nascent industry. LMDS is, therefore, quite different from the local exchange

on such services and should prohibit regulation by any state.[42/] However, if a LMDS licensee, regardless of whether that licensee is a local exchange carrier, is providing non-video services, an election to be regulated as a common or private carrier (and the consequent jurisdictional implications) should be governed by the following rules:

A. If a LMDS operator resells interconnected telephone service for profit, that operator must elect common carrier status. The Commission has already determined that under Section 3(gg) and 332 (c) of the Communications Act, a licensee cannot be regulated as a private land mobile carrier if it resells interconnected telephone service for profit.[43/] Therefore, the Commission should explicitly confirm that such LMDS

[42/]The courts have held that video communication services are inherently interstate services to which the FCC's jurisdiction applies. United States v. Southwestern Cable Co., 392 U.S. 157 (1968); New York State Commission on Cable Television v. FCC, 669 F.2d 58, 65 (2nd Cir. 1982).

[43/]Fleet Call, Inc., 6 FCC Rcd 1533, 1537, recon.dismissed, 6 FCC Rcd 6989 (1991); American Teltronix, 3 FCC Rcd 5347 (1988), recon. denied, 5 FCC Rcd 1955, 1956 (1990); Amendment of Part 90, Subparts M and S, of the Commission's Rules, 3 FCC Rcd 1838, 1840 (1988), recon. denied, 4 FCC Rcd 356 (1989); Amendment of Part 90 of the Commission's Rules to Prescribe Policies and Regulations to Govern the Interconnection of Private Land Mobile Radio Systems, 93 FCC 2d 1111, 1115 (1983), on recon., 49 Fed. Reg. 26066 (1984),

operators have a federally protected right to interconnection with the public switched network.[44/]

B. LMDS licensees who choose to be regulated as private carriers:

i. Are not common carriers for any purpose under the Communications Act;[45/]

ii. May offer service indiscriminately to eligible users on a commercial basis;[46/]

iii. Are not subject to foreign ownership restrictions;[47/]

iv. May establish rates for communications services without regulatory oversight by the FCC consistent with existing regulatory treatment of land mobile licensees, such LMDS licensees.

[44/] See, e.g., 47 U.S.C. Sections 201 (a), 332 (a) (1); Public Utility Comm'n of Texas v. FCC, 866 F.2d 1325 (D.C. Cir. 1989); Lincoln Telephone & Telegraph Co. v. FCC, 659 F. 2d 1092 (D.C. Cir. 1981); Declaratory Ruling, The Need To Promote Competition and Efficient Use of Spectrum for Radio Common Carrier Services, 2 FCC Rcd 2910 (1987), recon. denied, 4 FCC Rcd 2369 (1989); Amendment of Part 90, of the Commission's Rules to Prescribe Policies and Regulations to Govern the Interconnection of Private Land Mobile Radio Systems, 93 FCC 2d 1111, 1115 (1983), on recon., 49 Fed. Reg. 26066 (1984), aff'd by judgment sub nom. Telocator v. FCC, 764 F.2d 926 (D.C. Cir. 1985).

[45/] See Section 332(c)(2) of the Communications Act.

[46/] See Section 332(c)(1) of the Communications Act.

[47/] See Section 310(b) of the Communications Act.

v. Are not subject to state and local entry and rate regulation.[48/]

48. Suite 12 agrees with the Commission's proposal, at paragraph 27 of the Notice, that common carrier LMDS operators should be classified as non-dominant carriers pursuant to the Commission's Competitive Carrier decisions.[49/] Suite 12 also agrees with the Commission's tentative conclusions that, in both the video and telecommunications service areas, LMDS operators will not have captive customers who must take service from a monopoly or near monopoly. Indeed, LMDS operators are going to be at a distinct disadvantage in both the video and telecommunications markets, having to compete with entrenched cable and telephone companies whose market penetration levels may well be at, or near, 100 percent. Furthermore, with the advent of direct broadcast

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[48/] See Section 332(c)(3) of the Communications Act.

[49/] See Policy and Rules Concerning Rates and Facilities Authorizations for Competitive Carrier Services, Notice of Inquiry and Proposed Rulemaking, CC Docket No. 79-252, 77 FCC 2d 308 (1979); First Report and Order, 85 FCC 2d 1 (1980); Further Notice of Proposed Rulemaking, 84 FCC 2d 445 (1981); Second Report and Order, 91 FCC 2d 59 (1982), recon. FCC 83-69, released March 21, 1983; Second Further Notice of Proposed Rulemaking, FCC 82-187, released April 21, 1982; Third Further Notice of Proposed Rulemaking, Mimeo No. 33547, 48 Fed. Reg. 28,292 (June 21, 1983; Third Report and Order, 48 Fed. Reg. 46,791 (October 15, 1983); Fourth Report and Order, 95 FCC 2d 554 (1983); Fourth Further Notice of Proposed Rulemaking, 49 Fed. Reg. 11,856 (March 28, 1984); Fifth Report and Order, 98 FCC 2d 1191 (1984); Sixth Report and Order, 99 FCC 2d 1020 (1985); rev'd MCI v. FCC, 765 F.2d 1186 (1985). See also Tariff Filing Requirements for Interstate Common Carriers, Notice of Proposed Rulemaking, CC Docket No. 92-13, 7 FCC Rcd 804 (1992). Suite 12 assumes that, at some point, the Commission will develop a remedy for the ills created by AT&T v.

satellites and video dialtone services and the maturation of MMDS, cellular telephones, special mobile radio services, paging services, wireless in-building services, cordless phones, as well as personal communications services, the likelihood of an LMDS operator becoming a monopoly, or near monopoly, is even more remote.

49. Suite 12 supports the Commission's tentative conclusion, at paragraph 28 of the Notice, that the Commission should preempt state regulation of non-common carrier LMDS video operations because such services are inherently interstate in nature, and local and state entry and rate regulation would impede the swift and ubiquitous implementation of LMDS on a nationwide basis. This will further impede the development of competition to cable television operators and will delay the benefits of competition for consumers. The swift introduction of competition into the cable television industry is clear federal policy as articulated in the Cable Act of 1992.[50/] Likewise, state and local rate and entry regulation of private carriage by LMDS licensees is forbidden by Section 331 (c) (3) of the Communications Act.

[50/] See Section 2 (b)(1), "Statement of Policy." Cable Television Consumer Protection and Competition Act of 1992 which states: "It is the policy of the Congress in this Act to promote the availability to the public of a diversity of views and information through cable television and other video distribution media." See also Report of the Senate Committee on Commerce, Science, and Transportation together with Minority Views on S. 12, page 1, which states: "The purpose of this legislation is to promote competition in the multichannel video marketplace and to provide protection for consumers against monopoly rates and poor customer service."

50. The Commission, at paragraph 29 of the Notice, asks Suite 12, as the system inventor, to comment on the issue of whether the intrastate component of non-video services can be separated from the interstate component for the purposes of determining if the Commission may preempt state and local entry and rate regulation of common carrier non-video services.

51. LMDS telecommunications service will be provided in the functionally equivalent manner that such service is provided by local exchange companies. As such, these services cannot be severed into intrastate an interstate components any more than such services can be severed when provided by a local exchange company. As the Commission has noted, there are not two separate phone systems, one being used wholly intrastate.[51/] Likewise, when providing local exchange-like services, there will not be two separate LMDS systems, one being used wholly intrastate. In such situations, as the Court stated in National Association of Regulatory Utility Commissioners v. FCC, 880 F.2d 422, 431 (D.C. Cir. 1989) at 431, "the FCC may preempt inconsistent state regulation so long as it can show that the state regulation negates a valid federal policy." The valid federal policy involved in LMDS is to encourage competition in the provision, installation and maintenance of facilities pursuant to which consumers may obtain telecommunications services. Congress clearly articulated this policy with regard to bringing competition to the cable television

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[51/] See Second Computer Inquiry, Docket No. 20820, Final Decision, 77 F.C.C.2d 384, 455, ¶ 185.

marketplace.[52/] Suite 12 believes that one of the over-riding policies of the FCC has been the introduction of competition into all telecommunications markets, including local exchange service,[53/] and that such a policy is consistent with the goals of the Communications Act.[54/] Therefore, the Commission may preempt state regulation of LMDS to the extent such regulation negates the federal policy of ensuring a competitive market in telecommunications services. In Suite 12's view, state entry and rate regulation of LMDS will surely retard, if not totally negate, the ability of LMDS to become an effective telecommunications competitor. Accordingly, Suite 12 believes Federal preemption is necessary to assure that the Federal goal of competition is fully realized in the shortest possible time.

X. SERVICE AREAS

52. Suite 12 applauds the Commission's interest in facilitating natural market area licenses in order to achieve the three goals specified in Paragraph 30 of the Notice. The Basic Trading Area ("BTA") is the appropriate service area for LMDS since it forms a region of common influence within a community. BTAs have the additional benefit of more easily and cohesively addressing local government concerns because the BTA is delineated by county lines.

[52/] See discussion at Section IV.A.

[53/] See, e.g., National Association of Regulatory Utility Commissioners v. FCC, 880 F.2d 422, 429 (D.C. Cir. 1989).

[54/] 47 U.S.C. Section 151.

53. LMDS is not like cellular telephone in that it is not designed to provide high-speed mobile voice service. Therefore, MSAs and RSAs are not necessarily the optimal service area for LMDS. Furthermore, RSAs and MSAs may never have been appropriate for cellular. As the Commission pointed out in the PCS Proceeding,[55/] the cellular industry has been consolidating in recent years into large service areas. These larger areas provide greater economies of scale and scope in larger cellular operations. Suite 12 believes that the same economies that are driving cellular toward larger service areas will exist in LMDS.

54. Using BTAs, instead of smaller areas, will permit the FCC to minimize unproductive regulatory and transaction costs (because there will be fewer areas and licensees) and associated delay in getting LMDS to the American public. BTA-sized service areas will permit LMDS operators to tailor their systems to the natural geographic dimensions of LMDS markets, reduce the cost of interference coordination between LMDS licensees (if, for no other reason, because there will be fewer licensees) and simplify the coordination of technical standards.

55. Paragraph 31 of the Notice requests comment on the comparative costs of building LMDS systems in smaller versus larger service areas. There can be no argument that building a system for a BTA will be more expensive to design and construct than building a system for a smaller area. Due to Suite 12's cellular

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[55/] Personal Communications Services FCC Rcd 5676 (1992), Gen. Docket No. 90-314, ¶¶ 56-61.

configuration, the larger the area, the more cells (and, therefore, transmitters) are necessary to cover the area. Accordingly, if the Commission adopts BTAs for LMDS service areas, to create a realistic LMDS implementation, it must reduce both the proposed required Geographic Service Area ("GSA") and the percentage of the population residing within the BTA which must have service available within a specified time, and it must extend the time period in which the service must be offered.

56. Suite 12 proposes that the GSA be defined at proposed Section 21.1007 (c) (i) as including 66% of the population of the BTA. In addition, the licensee should be required, at Section 21.1014 of the proposed rules, to provide service to 66% of the population in the GSA within six years after receiving the initial license.[56/]

57. Suite 12 is aware of the Commission's desire to assure that the spectrum be used efficiently and that service be made available to the public in as rapid a manner as possible. Therefore, Suite 12 suggests the Commission adopt benchmarks to assure that licensees are progressing in a timely fashion to complete construction of their systems. Such benchmarks could include, for example, the requirement that (a) approximately 33% of the required initial system construction be completed by the end of year two; and, (b) 66% of the required initial system construction be completed by the end of year four. Such an approach would not

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[56/]The LMDS license term should be extended to ten years. See discussion infra. at Section XIII.C.

only provide the Commission with assurances that the system is

including LMDS.[58/] Therefore, Suite 12 believes that the Commission's current rules with regard to the ownership of MMDS licenses by cable companies should also apply to LMDS licenses which are used for video services.[59/] Congressional intent in the Cable Act was to promote competition in the cable industry.[60/] Ownership by the sole cable operator in a franchised area of a LMDS license providing video services would stifle that competition. Where there is more than one cable operator in a given area, the Commission's rules permit one of those cable operators to own a

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[58/] See Section 602(12), Communications Act, which states: "the term 'multichannel video programming distributor' means a person such as, but not limited to, a cable operator, a multichannel/multipoint distribution service, a direct broadcast satellite service, or a television receive-only satellite program distributor, who makes available for purchase, by subscribers or customers, multiple channels of video programming." LMDS licensees providing video entertainment services will make available, for subscriber purchase, multiple channels of video programming. Therefore, under the plain language of the Act, LMDS licensees providing video entertainment programming, fall within the definition of multichannel video programming distributor and the Commission should treat these licensees as such. Suite 12 suggests that since this is the proceeding in which the Commission is creating LMDS, this is the proper proceeding in which to determine if LMDS fits the definition of multichannel video programming distributor. Since the service does not yet exist, the Commission will find it difficult, if not impossible, to deal with LMDS in the Commission's MM Dockets 29-259 and 92-264 proceedings. Therefore, the Commission should deal with the issue in this proceeding.

[59/] See also the Commission's proposal re cross ownership bans in the Notice of Proposed Rulemaking and Notice of Inquiry in MM Docket No. 92-264, Horizontal and Vertical Ownership Limits, Cross-Ownership Limitations and Anti-Trafficking Provisions, Adopted December 10, 1992, released December 28, 1992, ¶ 24 et seq.

[60/] See discussion at Section IV.A.

MMDS license in the franchised cable area.[61/] The same rule should apply to ownership by a cable operator of a LMDS license which provides video services.

XII. MINORITY PREFERENCES

61. Suite 12 agrees with the Commission's tentative conclusion, in paragraph 37 of the Notice, that preferences for diversity in minority interests are appropriate for LMDS. Assuming LMDS licenses will be awarded by means of a lottery and in view of the fact that a LMDS licensee could provide mass media services, Suite 12 believes that, due to the requirements of 47 U.S.C. Section 309(i)(3)(A), the Commission has no discretion on this issue.[62/]

XIII. APPLICATION AND LICENSING ISSUES

A. Alienation Of Interests And Lender Collateral

62. Paragraph 38 of the Notice proposes that alienation of interests in an application for LMDS be prohibited. Paragraph 45 of the Notice proposes that no interest, direct or indirect, will be permitted in more than one application for the same market. Suite 12 requests that the rules adopted clearly provide that if an entity receives or is to receive a technology license fee for the use of its technology, such fee does not constitute an interest in

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[61/] Report and Order, in Gen. Docket Nos. 90-54 and 80-113, 5 FCC Rcd 6410 (1990); Order on Reconsideration, Gen. Docket Nos. 90-54 and 80-113, 6 FCC Rcd 6764 (1991); Second Report and Order, Gen. Docket No. 90-54, 6 FCC Rcd 6792 (1991).

[62/] 47 U.S.C. Section 309(i)(3)(C)(i).

either an application or a license. Such a rule provision would be consistent with the Commission's treatment of technology license fees in the IVDS proceeding. In that proceeding, the Commission unequivocally stated that a technology license fee for the use of technology does not constitute an interest in an application or a license. Accordingly, just as it did in the IVDS proceeding, the Commission should exclude technology license fees paid to Suite 12 from the definition of any direct or indirect interest in licenses or applications.[63/]

63. Likewise, the taking of equity positions (as qualified below) in LMDS licensees or applicants, by lending institutions and other passive investors to finance the construction of LMDS systems, should not be deemed by the Commission to be either an alienation (by the licensee or applicant) or an acquisition (by the lender) of a direct or indirect ownership interest in a LMDS license or application.[64/] Today's lending climate[65/] requires

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[63/] See Memorandum Opinion and Order, In the Matter of Amendment of Parts 0, 1, 2, and 95 of the Commission's Rules to Provide for Interactive Video Data Services, Gen Docket No. 91-2, RM-6196, 70 RR 2d 1647, 1651, ¶ 17. The Notice, at paragraph 20, recognizes that Suite 12 holds a patent for the technology to be used in LMDS.

[64/] Suite 12 is not suggesting something entirely novel. The Commission has recognized, in its broadcast attribution rules, that it needs to be more lenient with passive investors. The passive investor exception to the presumption of attribution created by the 5% attribution benchmark provides that a defined class of institutional investors may hold up to 10% of a company's voting stock interest without incurring attribution. The Commission considers three types of entities to be "passive" for this purpose: (1) investment companies, (2) insurance companies, and (3) bank trust departments. See 47 C.F.R. Section 73.3555.

that such incentives be a part of any lending transaction in order for lenders to be willing to finance the construction of a new and unproven telecommunications service. The Commission should acknowledge the reality of the financing business and permit the taking of equity positions, so long as the equity position is taken in the form of a security convertible into equity, exercisable only upon an event of a borrower's default and does not, in any case, amount to a controlling interest in the applicant.

64. The Commission should seek to facilitate the financing of the construction of LMDS systems quickly so that the benefits of this new service might reach the American public as soon as possible. Without financing, these systems cannot be constructed by anyone except large, capital-rich companies.[66/] This is for the simple reason that these systems, like other telecommunications systems, are capital intensive to build. For example, assuming transmitter costs of $250,000 each and a headend cost of $1,000,000

[65/](...continued)

[65/]See Notice of Proposed Rulemaking and Notice of Inquiry, MM Docket No. 92-51, ¶ 1, In the Matter of Review of the Commission's Regulations and Policies Affecting Investment in the Broadcast Industry. "We believe this action is particularly appropriate now, since the availability of capital has recently become a matter of increasing concern to the industry."

[66/]Failure to facilitate the acquisition of capital will result in a LMDS populated exclusively by large companies with very deep pockets, for they are the only companies which do not need to tap into outside sources of capital. Suite 12 anticipates that such companies' comments will ask that the Commission impose even more stringent financial requirements in order to reduce the number of potential lottery applicants and thereby enhance their chances of winning the lottery. New entrants to telecommunications, including, in particular, minorities and women, who historically have experienced significant difficulty securing adequate start-up funding, will continue to be left out when it comes to LMDS.

each,[67/] and assuming, further, that the provider is using cells with a radius of 3 miles, it will take 412 cell site transmitters and two headends to cover the New York BTA. This will cost over $105,000,000. Moreover, this figure is just for transmitters and headends and does not include the cost of subscriber equipment, construction, installation, programming, and other associated costs.

65. The Commission's intent, with the Notice's proposed Rule Section 21.1015, is to prohibit an applicant from increasing his or her probability of being selected in the lottery process by filing individually or being a partner in multiple applications in a single service area.[68/] Passive investors, providing risk and debt capital to finance the construction of LMDS facilities, are generally not attempting to improve their probability of being selected in the lottery process; rather, they are trying to maximize their collateral position in case their loan goes bad. The Commission should recognize the difference and facilitate LMDS' ability to attract capital to construct LMDS systems.

66. For the foregoing reasons, Section 21.1015 of the Commission's proposed rules should be revised to read: